

PrimaryConnections

backward design process

Plan and develop learning experiences for the *Evaluate, Elaborate, Explain, Explore* and *Engage* phases. Include appropriate activities, questions, literacy focuses, cooperative learning strategies and assessment processes (diagnostic, formative and summative).

EVALUATE: Students re-represent their understanding and reflect on their learning. Teachers collect evidence about the achievement of outcomes.

- Determine what you want students to know and to do.
- Determine assessment processes which allow students to demonstrate what they have learnt and what they can do.
- Decide the ways students can accurately represent their understanding of the science concepts and processes.
- Provide opportunities for students to evaluate and reflect on their learning.

ELABORATE: Extend understanding to a new context or make connections to additional concepts through a student-planned investigation.

- Negotiate activities which best extend students' understanding in a new context.
- Support students in planning science investigations which make connections to additional concepts.

EXPLAIN: Develop scientific explanations for observations and represent developing conceptual understanding. Consider current scientific explanations.

- Provide opportunities for explaining the science concepts leading students to new, more scientific understanding.
- Discuss current scientific explanations using appropriate vocabulary.

EXPLORE: Provide hands-on experience of the phenomenon.

- Decide the activities which provide exploratory experiences of the science observations and ideas.

ENGAGE: Engage students and elicit prior knowledge.

- Decide the best way to capture students' interest and identify ways to find out what students think they know about the topic.
- Link with and challenge students' preconceptions.

Tips for unit planning

- Collaborate with colleagues to maximise the generation of effective ideas.
- Don't try to cover too much content.
- Begin at the end.
- Pay close attention to the purpose of each phase of the 5Es by using the PrimaryConnections 5Es teaching and learning model.
- Remember *Explore* before *Explain*.
- Brainstorm a variety of modes for students to represent their ideas.
- Limit the number of concepts for the unit.